

REMARKS

Claims 1, 3-11, and 13-17 are pending and stand rejected. Claim 18 is added by this Amendment. Claims 1, 3-11, and 13-18 are therefore at issue.

Support for the Amendments

New Claim 18 is supported at least as is Claim 1 in its current form.

Claim 1 is amended to reverse the Examiner's amendment in the Office Action of November 19, 2001. The Examiner's amendment incorrectly changed the meaning of the Claim 1 to suggest that the recited docking assembly has a memory storage bay. Before the Examiner's amendment, Claim 1 correctly recited that the docking assembly has "lateral sides for fixing the docking assembly in a memory storage bay" (emphasis added). For clarification, the Examiner's attention is directed Applicant's Figure 2 which shows a docking assembly 10 which has lateral rails for fixing docking assembly 10 in a disk drive bay of computer 14 (Figure 1). This distinction is addressed more completely below.

Claim 15 is amended to recite that the memory storage device rack "is mounted in a memory storage bay of a personal computer." This amendment is supported at least as is the similar language of Claim 1.

Claim 17 is amended to recite a personal computer as an element of the recited system. Previously, Claim 17 recited "a rack" and "the memory storage device rack." Claim 17 is

therefore further amended to consistently recite “rack.” Claim 17 as amended is supported at least as is Claim 17 in its prior form.

No new matter is added.

The Claims Are Allowable over the Cited Art

Klatt

The Examiner rejected Claims 1, 3-11, and 13-17 as unpatentable in view of Klatt et al. in combination with Tsai, Iwasaki, Darden, Cheng, Heung, Japanese Patent Abstract 8339427 (hereinafter the ‘427 reference), and Lwee. Applicant respectfully traverses this rejection and requests reconsideration and withdrawal of this rejection.

In short, Claim 1 recites “a docking assembly,” “a carrier,” “fan mounts,” and “a PC card device.” The interaction between the docking assembly and the carrier in Claim 1 is distinct from the system taught by Klatt et al.

The Examiner analogized contacting unit 1 of Klatt et al. to the recited carrier of Claim 1. Contacting unit 1 of Klatt et al. is designed to be inserted into a PCMCIA slot of a computer. In contrast, the carrier of Claim 1 is “slidably mountable in the docking assembly” and the docking assembly is designed to be “[fixed] in a memory storage bay” “of a personal computer.” Thus, in the Examiner’s analysis, Klatt et al. neither teach nor suggest a docking assembly interrelated between the recited carrier and memory storage bay of a personal computer in the manner recited by Applicant’s Claim 1.

In support of this rejection, the Examiner cited other references for rails, handles, fans, and connectors but did not cite any reference as teaching or suggesting the missing element of the docking assembly interrelated between the memory storage bay and the carrier.

Accordingly, the Examiner's rejection in the November 19, 2001 Office Action does not represent a prima facie case for unpatentability of Claim 1 in view of Klatt et al. in combination with the other cited references, assuming arguendo that such a combination is properly motivated in the prior art. Claim 1 is therefore allowable over Klatt et al.

Claims 3-6 and 14 depend from Claim 1 and are therefore allowable over Klatt et al. in combination with the other cited references.

Claim 7 recites both "a docking assembly" and "a carrier" with similar interrelationships to those discussed above with respect to Claim 1. Accordingly, no prima facie is made in the November 19, 2001 Office Action for unpatentability of Claim 7 over Klatt et al. in combination with the other cited references. Claims 8-11 depend from Claim 7 and are therefore similarly allowable over Klatt et al.

Claim 13 also recites both "a docking assembly" and "a carrier" with similar interrelationships to those discussed above with respect to Claims 1 and 7. Accordingly, no prima facie is made in the November 19, 2001 Office Action for unpatentability of Claim 13 over Klatt et al. in combination with the other cited references.

As amended, Claim 15 recites "a carrier connectable with a memory storage device rack which is mounted in a memory storage bay of a personal computer." Thus, Claim 15 recites

interrelationships between a carrier, a memory storage device rack, and a memory storage bay similar to those discussed above with respect to Claims, 1, 7, and 13. Accordingly, the Examiner's rejection of Claim 15 in view of Klatt et al. is respectfully traversed for at least the reasons given above. Claim 16 depends from Claim 15 and the rejection thereof is traversed for the same reasons.

Claim 17 as amended recites "a rack fixed in a memory storage bay of the personal computer, the rack having rails for receiving a carrier; [and] a carrier being connectable with the rack." Accordingly, Claim 17 recites a similar interrelationship between a carrier, rack, and memory storage bay of a personal computer similar to the recited interrelations discussed above. Accordingly, the rejection of Claim 17 in view of Klatt et al. is respectfully traversed for the same reasons given above with respect to Claims 1, 7, 13, and 15.

New Claim 18 recites similar interrelationships between a housing, a docking assembly, and a drive bay of a computer system. In particular, new Claim 18 recites (i) "one or more PC card ports which are mounted inside the housing," (ii) that the "housing ... is adapted to be capable of coupling with the docking assembly," (iii) that the "docking assembly ... is configured to receive a disk drive rack," and (iv) that the drive bay is included in a computer system. Applicant therefore respectfully submits that Claim 18 is allowable for the same reasons given above with respect to Claims 1, 3-11, 13-17.

Pollard

The Examiner rejected Claims 1, 3-11, and 13-17 as unpatentable in view of Pollard et al. in combination with Lwee, Klatt, Shen, Darden, Tsai, Wallace, Heung, Iwasaki. Applicant respectfully traverses this rejection and requests reconsideration and withdrawal of this rejection.

Pollard et al. teach a bracket 20 for fitting a 3½-inch disk drive 10 into a 5¼-inch drive bay 12 and for cooling the 3½-inch disk drive. In support of this rejection, the Examiner analogized the disk drive 10 of Pollard et al. to the recited "carrier" of Applicant's claims. However, the Examiner also asserted that Pollard et al. teach a fan 28 in the carrier despite Pollard et al.'s clear teaching that the fan is included in the bracket 20. Applicant addresses both interpretations of the Examiner's argument.

16 Assuming the Examiner asserted that the recited "carrier" reads on disk drive 10 of Pollard et al., it is presumed that the Examiner implicitly asserts that the recited "docking assembly" reads on bracket 20 of Pollard et al. Under this interpretation, it is unclear to Applicant how a "PC card [can be] mounted on the [3½-inch disk drive, i.e., carrier]" as recited by Claim 1. No such teaching or suggestion is found in the cited art. Claim 1 is therefore allowable over Pollard et al. in combination with the other cited references under this interpretation. The remainder of the claims recite similar language and are therefore similarly allowable in view of Pollard et al.

19 Assuming that the Examiner asserted that the recited "carrier" reads on bracket 20 of Pollard et al., there is no teaching or suggestion of a "docking assembly" between the carrier and the bay 12 of the computer system. Accordingly, the claims are allowable over Pollard et al. in

combination with the cited references for the reasons given above with respect to the rejection in view of Klatt et al.

Kaneda

The Examiner rejected Claims 1, 3-11, and 13-17 as unpatentable in view of Kaneda et al. in combination with Cheng, Heung, Darden, Klatt, Tsai, Wallace, Shen, and Iwasaki. Applicant respectfully traverses this rejection and requests reconsideration and withdrawal of this rejection.

Kaneda et al. teach an IC card port replicator. It is unclear whether the Examiner believed that Applicant's recited carrier or docking adaptor reads on the IC card port replicator of Kaneda et al. Applicant accordingly addresses both interpretations.

If the recited "carrier" reads on the device of Kaneda et al., there is no teaching or suggestion of a docking adaptor between the carrier and the bay of the computer. Conversely, if the recited "docking adaptor" reads on the device of Kaneda et al., there is no teaching or suggestion of a carrier between the docking adaptor and the PC card device of Applicant's Claim 1.

Accordingly, all pending claims are allowable over Kaneda et al. in combination with the cited references for at least the reasons given above.

MARKED UP AMENDMENTS TO SHOW CHANGES

IN THE CLAIMS

1. (Seven times amended) A carrier and docking assembly for interconnecting a PC card device to a memory storage device bay of a personal computer, comprising:

a docking assembly having a pair of lateral sides for fixing the docking assembly[,] in a memory storage bay, the lateral sides have rails;

a carrier slidably mountable in the docking assembly, the carrier having rails that mate with the rails of the docking assembly, the carrier having a front and a rear, the front has an opening defining plural offset PC card slots for receiving plural PC cards, the rear has a plug for removably interconnecting the carrier with [a] the docking assembly;

a fan mounts in the carrier for cooling the carrier; and

a PC card device having adapter circuitry mounted on the carrier and electrically connected with the plug.

15. (Amended) A carrier for interconnecting a PC card device to a personal computer, comprising:

a carrier connectable with a memory storage device rack [with] which is mounted in a memory storage bay of a personal computer and which includes rails, the

carrier having rails that slide with respect to the rails of the rack to enable the carrier to slide into the rack and to removably mount the carrier in the rack; and
a card device mounted in the carrier and being adapted with the plural offset card slots for receiving plural cards.

17. (Amended) A [new] system [having a docking assembly capable of docking memory storage devices or plural card devices to a personal computer,] comprising:

a personal computer;

a rack fixed in a memory storage bay of the personal computer, the rack having rails for receiving a carrier;

a carrier being connectable with the [memory storage device] rack, the carrier having rails that slide with respect to the rails of the rack to enable the carrier to slide into the rack and to removably mount in the rack;

a card device mounted in the carrier having plural offset slots for receiving plural cards of different sizes; and

the carrier having a handle for removing the carrier from the rack so that removal of the carrier enables replacement of the carrier with another carrier holding a hard disk drive, a card device, or other device.

18. (New) A removable PC card device for facilitating data communication

between one or more PC cards and a computer system which includes one or more drive bays, at least one of which includes a docking assembly which is configured to receive a disk drive rack, the PC card device comprising:

a housing which is adapted to be capable of coupling with the docking assembly in a manner in which the docking assembly is configured to receive disk drive racks; and

one or more PC card ports which are mounted inside the housing and which are adapted to receive the one or more PC cards and to connect the one or more PC cards to the computer so as to enable data communication between the PC cards and the computer when the housing is coupled with the docking assembly.